

Prototype Storm Surge Watch/Warning Graphic

Part I - Mission Connection

- a. Product Description – The prototype storm surge watch/warning graphic highlights areas along the Gulf and Atlantic coasts that have a significant risk of life-threatening storm surge inundation from a tropical cyclone, displaying areas that would qualify for inclusion under a storm surge watch or warning under development by the National Weather Service. The graphic represents the first step of a phased implementation toward an NWS storm surge watch/warning, but for 2015 does not represent an official NWS watch/warning. The NWS plans to debut an experimental storm surge watch/warning in 2016. After incorporating both user and partner input, the NWS expects to make the storm surge watch/warning fully operational in 2017.

Prototype storm surge watch/warning definitions:

Storm Surge Watch: The possibility of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 48 hours, in association with a tropical, subtropical or post-tropical cyclone. The watch may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The watch may also be issued for locations not expected to receive life-threatening inundation, but which could potentially be isolated by inundation in adjacent areas.

Storm Surge Warning: The danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours, in association with a tropical, subtropical or post-tropical cyclone. The warning may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The warning may also be issued for locations not expected to receive life-threatening isolated by inundation in adjacent areas.

- b. Purpose – The graphic is intended to introduce to users the concept of a separate warning for storm surge inundation, to identify and help users visualize areas most at risk from life-threatening surge, and serve as a call to action. All persons, regardless of whether or not they are in the highlighted areas shown by the graphic, should promptly follow evacuation orders and other instructions from local emergency management officials.
- c. Audience – Federal, state, and local government agencies, media and the general public.
- d. Presentation Format - Interactive Google map.

e. Feedback Method

Questions and comments may be addressed to:

National Weather Service
Attn: John Kuhn, W/OS21
1325 East-West Highway, Room 13124
Silver Spring, MD 20910-3283

or e-mail questions and comments to: john.f.kuhn@noaa.gov

Part II - Technical Description

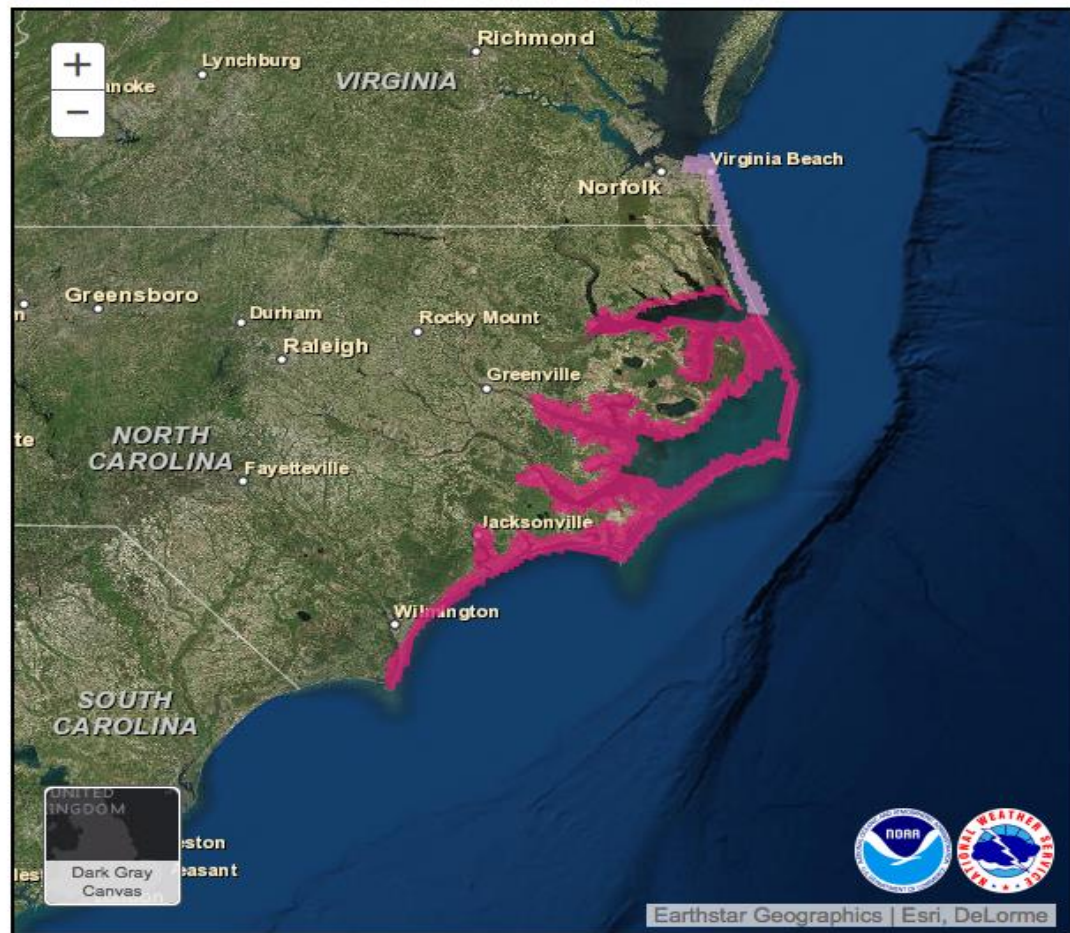
- a. Format & Science Basis - The graphic is the results of a collaborative process between the National Hurricane Center (NHC) and Weather Forecast Offices (WFOs). The primary objective guidance for the graphic will be P-Surge, an ensemble-based probabilistic system driven by the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model, the latest NHC official tropical cyclone forecast, and the typical errors of the NHC forecasts. Forecaster confidence, continuity from advisory to advisory, and other subjective factors will also help determine the areas to be depicted in the prototype graphic. For purposes of the prototype graphic, life-threatening inundation is defined to be three feet of water above ground level.
- b. Product Availability – The graphic will be issued 48 hours before the possibility of life-threatening storm surge from a tropical cyclone for areas along the Gulf and Atlantic coasts of the United States. The graphic will be available from the NHC website at <http://www.hurricanes.gov>.

Additional Information

Prototype examples:

Prototype Storm Surge Watch/Warning Graphic*

Hurricane Zelda
Advisory 12 Issued: Fri Jul 04 2014 8 PM EDT



0 30 60mi

Prototype Storm Surge Watch/Warning

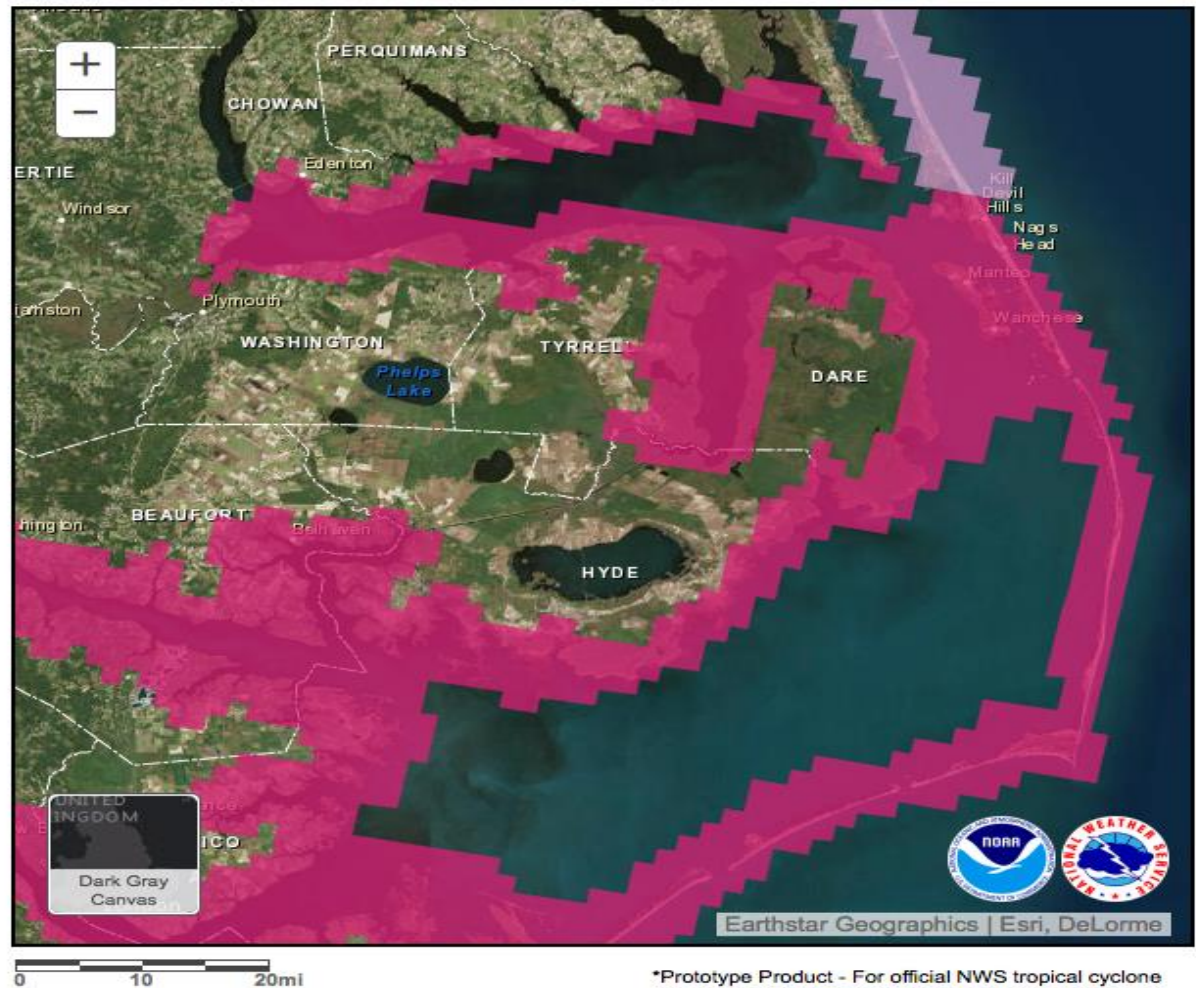
- Prototype Storm Surge Warning
- Prototype Storm Surge Watch

*Prototype Product - For official NWS tropical cyclone information, see hurricanes.gov. This graphic displays areas that would qualify for inclusion under a storm surge watch/warning that is under development by the National Weather Service. A storm surge warning indicates there is a danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours. A storm surge watch indicates that life-threatening inundation is possible somewhere within the specified area, generally within 48 hours. All persons, regardless of whether or not they are in the highlighted areas shown in the graphic, should promptly follow evacuation orders and other instructions from local officials. User feedback on the prototype storm surge watch/warning graphic can be provided at LINK. Upon completion of development, formal public comment/review of this graphic and the experimental storm surge watch/warning will take place in 2016, with operational implementation planned in 2017, if approved.

Prototype Storm Surge Watch/Warning Graphic*

Hurricane Zelda

Advisory 12 Issued: Fri Jul 04 2014 8 PM EDT



Prototype Storm Surge Watch/Warning

- Prototype Storm Surge Warning
- Prototype Storm Surge Watch

*Prototype Product - For official NWS tropical cyclone information, see hurricanes.gov. This graphic displays areas that would qualify for inclusion under a storm surge watch/warning that is under development by the National Weather Service. A storm surge warning indicates there is a danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours. A storm surge watch indicates that life-threatening inundation is possible somewhere within the specified area, generally within 48 hours. All persons, regardless of whether or not they are in the highlighted areas shown in the graphic, should promptly follow evacuation orders and other instructions from local officials. User feedback on the prototype storm surge watch/warning graphic can be provided at [LINK](#). Upon completion of development, formal public comment/review of this graphic and the experimental storm surge watch/warning will take place in 2016, with operational implementation planned in 2017, if approved.